



## Proposed Glasgow Bridge Improvements

***Innovative solutions can provide cost-effective improvements to this Missouri River crossing.***



### **GLASGOW BRIDGE (Route 240) — TODAY**

- Built in 1922
- Worst condition major river bridge
- Rehabilitated in 1987
- Requires frequent maintenance
- Unscheduled bridge closures
- Narrow roadway — 20.3 feet
- Vertical clearance — 14.9 feet



### **GLASGOW BRIDGE — TOMORROW**

- New roadway and girders
- 26 feet wide (11-ft lanes, 2-ft shoulders)
- No vertical clearance restrictions
- Extends life by 50 years
- Minimizes future maintenance
- Minimizes environmental issues/impacts
- Accelerated construction schedule

## **Missouri River Bridge at Glasgow (Route 240) - Partial Replacement**

MoDOT has identified an innovative solution that will extend the life of the Missouri River Bridge at Glasgow for up to 50 years with a partial replacement project. MoDOT will remove the existing deck and steelwork from the supporting piers, then provide new steel and roadway on top to produce a new driving surface.

The cost — estimated at \$14.4 million — is not much more than the cost of rehabilitation, is affordable and saves money and effort by reusing existing infrastructure. The partial replacement will close the bridge for up to 12 months.



**MoDOT Challenges**—The nation's two mightiest rivers — the Mississippi and Missouri — flow for more than 1,000 miles through Missouri. Consequently, Missouri has more major river bridges — 55 — than any other state, and virtually all of them span these two rivers. These bridges are big and costly, both to construct and to maintain, and many are old. Carefully protecting these significant investments through maintenance, rehabilitation or replacement is critical to the economic vitality of Missouri.

MoDOT has 25 crossings over the Missouri River alone, many of which are critical links to rural communities on opposite sides of the river that depend on an agricultural economy. One that needs immediate attention is in Central Missouri at Glasgow. It's been 20 years since this structure was last rehabilitated, and it is frequently closed and/or restricted for up to a week at a time for regular maintenance. This bridge alone would cost more than \$22 million to completely replace — with millions more for associated costs like right of way acquisition, connecting roadway work, etc.

MoDOT's challenge is to improve as much of its system as possible with available resources. Finding innovative and cost effective solutions allows for another project somewhere else. There are a range of options that can provide best-value improvements at this location.

### **Historical Significance**

MoDOT recognizes that this bridge is historically significant, but it is structurally deficient in design and functionally obsolete for today's use.

### **Innovation Is The Answer—*Partial Replacement***

MoDOT has identified an innovative solution that will extend the life of the Glasgow river bridge crossing by another 50 years — a great benefit, increase the roadway width to 26 feet, and minimize impacts to the river and surrounding area. MoDOT will remove the existing deck and steelwork from the supporting piers, then provide new steel and roadway on top to produce a new driving surface. The cost — estimated at \$14.4 million — is not much more than the cost of rehabilitation, is affordable and saves money and effort by reusing existing infrastructure.

This innovative strategy, though, will require complete closure of the facility for up to 12 months. MoDOT realizes that closure creates issues for the community — planting and harvest seasons, access to jobs and schools, emergency services ... just to name a few. Lengthy detours that would be required have many different types of consequences, as does the timing of the proposed improvements. MoDOT would seek to minimize impacts wherever possible, but some will be unavoidable if this effort is to swiftly move forward. To do so, community leaders, the general public, other stakeholders and MoDOT have come together in a collaborative effort that will result in a valuable, long-lasting resource at this location.



### **Alternative Transportation Solutions**

MoDOT continues to investigate alternative transportation solutions to provide access across the river during the proposed bridge closure. The options currently being pursued are shown below in order of community preference. Preliminary cost estimates are also shown, but funding for these solutions remains an issue. We are working with the community and researching all available means, including potential Federal funding, to find a way to provide some type of service while the bridge is closed.

<b>Service</b>	<b>Cost</b>	<b>Potential Schedule</b>
Vehicle ferry	\$1.4 M	12 hours/7 days
Passenger rail	unknown	unknown
Shuttle service	\$0.25 M	12 hours/5 days
Amphibious vehicle	\$0.15 M	to be determined

### **Summary**

- There are some challenges involved with the Partial Replacement option, but MoDOT believes those that involve engineering decisions are manageable. In short, strange as it may seem with a project this large, building the bridge is the easy part. The bigger issues involve public and agency acceptance of the innovative strategy that would keep work out of the river in order to provide an economical, longer-term improvement, while accepting that the tradeoff would be restricted access across the river for up to a year.

### **Latest Update**

January 11, 2007 -- News Release

#### **Glasgow Bridge Project Awarded**

MACON - The Missouri Highways and Transportation Commission awarded a contract for \$14,381,799.60 on Thursday, January 10 to Jensen Construction Company for the rehabilitation of the Historic Missouri River Bridge on Route 240.

"Because the contract amount came in over the estimated cost for this project, there are no additional monies available for MoDOT to fund an alternate transportation system during the bridge closure," said Design Engineer Brian Haeffner. "However, we will continue to pursue other funding alternatives with the community and other sources to provide some type of transportation service; as we understand the impact the closure will have on those who use the bridge."

Although the bid amount was above the estimate, MoDOT is pleased that it can provide this needed improvement, and the citizens of Missouri are getting a good return on their investment. The new bridge will be wider, have no vertical clearance restrictions, and will last 50 plus years, a huge benefit to our state's transportation system and the surrounding communities.

The current timeline as the project moves forward:

Contractor Notice to Proceed	March 10, 2008
Begin Bridge Closure Window	June 1, 2008
Bridge Closure Window	15 months
Maximum Bridge Closure Days	365 calendar days
End Bridge Closure Window	Sept. 1, 2009
Project Completion Date	Dec. 31, 2009